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IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re United States Patent of: Docket No.: 4197-116 Certificate AUG 0-1 2006 **Applicants:** NIEMZ, Frank-Gunter, et al. Conf. No.: 9811 of Correction Patent No. 6,972,101 Art Unit: 1722 Date Issued: December 6, 2005 Examiner: Joseph S. Del Sole Title: METHOD AND DEVICE FOR **Customer No.:** REGULATING THE 23448 **COMPOSITION OF SOLUTIONS**

FACSIMILE TRANSMISSION CERTIFICATE ATTN: Examiner Joseph S. Del Sole Fax No. (571) 273-8300

I hereby certify that this document, along with any enclosures identified herein, is being filed in the United States Patent and Trademark Office, via facsimile transmission to Attn: Certificates of Correction Branch, Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450, on the date specified below, to United States Patent and Trademark Office facsimile transmission number (571) 273-8300.

Number of Pages (including cover)

Kate Pope

July 28, 2006

Date

REQUEST FOR CERTIFICATE OF CORRECTION IN U.S. PATENT NO. 6,972,101 (U.S. PATENT APPLICATION NO. 10/089,143)

Attn: Certificates of Correction Branch Commissioner for Patents P.O. Box 1450 Alexandria, Virginia 22313-1450

Sir:

This responds to the June 7, 2006 letter from the U.S. Patent and Trademark Office (attached), regarding a Request for Correction in the subject patent, filed on May 23, 2006 by the

4197-116

undersigned attorney.

The June 7, 2006 letter from the USPTO indicates that the correction at column 5, line 25 of the subject application is no fault of the Patent and Trademark Office; however, at page 2 of Applicants' June 15, 2005 Response, in claim 1, paragraph (f), the letter 's' was clearly stricken through to indicate removal of the 's' from the word 'solutions.' The amendment of this claim was never properly entered into the record of the subject application by the USPTO, and instead the strike-through was misidentified by the USPTO as a hyphen. A copy of the Applicants' June 15, 2006 Response is enclosed herewith for your reference.

It is hereby requested that a Certificate of Correction be issued to correct the record of the subject patent. If any issues remain outstanding incident to the issuance of such Certificate, the Examiner is requested to contact the undersigned attorney at (919) 419-9350 to discuss same.

Respectfully, submitted,

Steven J. Hultquist Reg. No. 28,021

Attorney for Applicants

INTELLECTUAL PROPERTY/ TECHNOLOGY LAW Phone: (919) 419-9350 Fax: (919) 419-9354 Attorney File No.: 4197-116

Enclosures:

USPTO Letter dated June 7, 2006 [2 pg.] Copy of June 15, 2005 Response [9 pgs.]

The USPTO is hereby authorized to charge any deficiency or credit any overpayment of fees properly payable for this document to Deposit Account No. 083284



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Commissioner for Patents United States Patent and Trademark Office P.O. Box 1450 Alexandria, VA 22313-1450 www.usplo.gov

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Date Mailed : June 7, 2006 iril

Patent No.

: 6,972,101 B1

Inventor

: Niemz et al

Patent Issued: December 6, 2005

Title

: METHOD AND DEVICE FOR REGULATING THE COMPOSITION

OF SOLUTION(S)

Docket No.

: 4197-116

Re: Request for Certificate of Correction

Consideration has been given your request for the issuance of a certificate of correction for the above-identified patent under the provisions of Rule 1.322.

Inspection of the file of the application for the patent reveals that column 5, line 25 of the specification is/are printed in accordance with the record in the Patent and Trademark Office, as passed to issue by the examiner. There being no fault on the part of the Patent and Trademark Office, it has no authority to issue a certificate of correction under the provision of 1.322.

In view of the foregoing, your request for certificate of correction is hereby denied. However, further consideration will be given these matters, upon receipt of a request for certificate of correction under the provisions of 1.323, accompanied by the appropriate fee which is presently \$100.

A certificate of correction will be issued to correct the error(s) noted in your request.

Future correspondence concerning this matter should be filed and directed to Decisions & Certificates of Correction Branch.

Commissioner of Patents P.O. Box 1450 Alexandria, VA 22313-1450 Attn: Certificates of Correction Branch

David Irvine Cecilia Newman, Supervisor Decisions & Certificates of Correction Branch 703/308-9590 or 703/305-4362 (Fax 571/273-9927) Steven J. Hultquist Intellectual Property/Technology Law Box 14329 Research Triangle Park, N.C. 27709

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| | Applicaer: | Frank-Gunter Niems, et al. | Examiner: | Joseph S. Dei Sole | |
| | Application No.: | 10/969,143 | Art Units | 1722 | |
| | Data Filed: | blarek 26, 2982 | Confirmation No.: | 9811 | |
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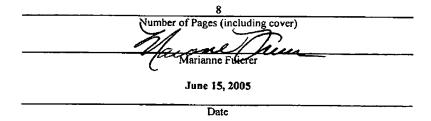
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IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re United States Patent Application of: Docket No.: 4197-116 Applicant: Frank-Gunter Niemz, et al. Examiner: Joseph S. Del Sole Application No.: 10/089,143 **Art Unit:** 1722 Date Filed: March 26, 2002 Confirmation No.: Title: Customer No.: METHOD AND DEVICE FOR 23448 REGULATING THE COMPOSITION OF SOLUTION(S)

> FACSIMILE TRANSMISSION CERTIFICATE ATTN: Examiner Joseph S. Del Sole Fax No. (703) 872-9306

I hereby certify that this document is being filed in the United States Patent and Trademark Office, via facsimile transmission Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450, on June 15, 2005, to United States Patent and Trademark Office facsimile transmission number (703) 872-9306.



RESPONSE TO MAY 13, 2005 OFFICE COMMUNICATION IN U.S. PATENT APPLICATION NO. 10/089,143

Commission for Patents P. O. Box 1450 Alexandria, VA 22313-1450

Sir:

In response to the May 13, 2005 Office Communication please amend the above-identified application as follows:



In the Claims

- 1. (Currently amended) A process for the regulation of the composition of solution(s) for the manufacture of cellulosic mouldings, comprising:
 - (a) mixing cellulose pulp and water containing aminoxide to form a cellulosic suspension in a mixing apparatus equipped with metering elements;
 - (b) moving the cellulosic suspension from the mixing apparatus to a first evaporation device and evaporating water from the cellulosic suspension to form a cellulose solution;
 - (c) moving the cellulose solution from the first evaporation device to an extruding device and measuring a non-optical property of the cellulose solution for adjusting concentrations of the cellulosic suspension by means of the metering elements in stage (a) and/or the cellulose solution in the evaporation device of stage (b);
 - (d) extruding the cellulose solution through an air gap into a precipitation bath, which contains an aqueous aminoxide solution wherein the cellulose solution coagulates to form mouldings and removing at least some of the aqueous aminoxide solution from the precipitation bath to a second evaporation device for evaporating to a predetermined aminoxide concentration for reintroduction into the mixing apparatus;
 - (e) introducing and conducting the formed mouldings through a washing bath wherein an aqueous washing solution washes out remaining aminoxide from the mouldings; and
 - (f) moving at least some of the aqueous aminoxide solutions-from the washing bath stage
 - (e) and measuring at least one non-optical property in the aqueous aminoxide solution therein before the aqueous aminoxide solution is reintroduced into the precipitation bath, and wherein a the measured values of the non-optical properties is are used for regulating the composition of the aqueous aminoxide solution—measured solutions according to the deviation of the measured value of at least one non-optical property in the aqueous aminoxide from a given reference value determined from a standard for a reference aqueous aminoxide composition wherein the measured non-optical property of the aqueous aminoxide solution is selected from the group consisting of: dielectricity constant, inductive conductivity, microwave absorption, density, water content and ultrasonic speed.
- 2. (Previously presented) The process according to claim 1, wherein the temperature of the solution is measured at or shortly before or after the measurement of the non-optical property and the measured value for the non-optical property is compensated on the basis of the measured temperature.



- (Previously presented) The process according to claim 1, wherein the non-optical property 3. is measured in-line.
- 4. (Previously presented) The process according to claim 1, wherein adjustments are made to the components of the solutions in stage (a), (d), or (e).
- (Previously presented) The process according to claim 1, wherein adjustments are made to 5. the operating conditions in the evaporation device of stage (b) and/or (f) for the regulation of the composition of the solutions.
- 6. (Previously presented) A device used for the regulation of the composition of solution(s) for the manufacture of cellulosic mouldings, comprising:
 - a mixing apparatus containing at least two metering elements for introduction of composition components;
 - a dissolving and evaporation device communicatively connected to the mixing apparatus; an extrusion device communicatively connected to the dissolving and evaporation device; a precipitation bath downstream of the extrusion device and separated therefrom by an air gap;
 - at least one washing bath downstream from the precipitation bath;
 - a line connected between the washing bath and at least one of the metering devices, wherein the line further comprises a return evaporator;
 - a plurality of measuring devices for the measurement of a non-optical property and arranged to communicate with metering elements, the evaporator device and/or return evaporator via at least one regulation circuit for the regulation of the composition of the solutions contained in the mixing apparatus, the dissolving and evaporation device and/or the precipitation bath.
- 7. (Previously presented) The device according to claim 6, wherein the device further comprises a temperature measuring device for measuring the temperature of the solution and for compensating the measured values of the measuring device according to the temperature.



- 8. (Previously presented) The process according to claim 2, wherein the non-optical property is measured in-line.
- 9. (Previously presented) The process according to claim 1, wherein the solution from step (e) is concentrated before the non-optical property is measured.
- 10. (Previously presented) The process according to claim 3, further comprising measuring the temperature of the solutions of steps (d) and/or (e) at a time selected from the group consisting of: before the measuring of the non-optical property, after the measuring of the non-optical property, and at approximately the same time as measuring the non-optical property, and wherein the measured value is compensated on the basis of the measured temperature.
- 11. (Previously presented) The device of claim 6, further comprising a return line from the washing bath connected to the precipitation bath.
- 12. (Previously presented) The device of claim 11, further comprising a measuring device positioned between the washing bath and precipitation bath.
- 13. (Previously presented) The device of claim 7, wherein the measuring device measures a measurement selected from the group consisting of: a dielectricity constant, inductive conductivity, microwave absorption, density, water content and ultrasonic speed.
- 14. (Previously presented) The device of claim 13, wherein each measuring device is measuring a different property.
- 15. (Previously presented) The process according to claim 1, wherein the aqueous aminoxide solutions from stage (d) and (e) are measured for a non-optical property.
- 16. (Currently amended) A process for the regulation of the composition of solution(s) for the manufacture of cellulosic mouldings, comprising:
- (a) mixing cellulose pulp and a water containing aminoxide to form a cellulosic suspension;
- (b) evaporating water from the cellulosic suspension to form a cellulose solution;
- (c) extruding the cellulose solution through an air gap into an precipitation bath, which contains an aqueous solution wherein the cellulose solution coagulates to form mouldings;



- (d) conducting the formed mouldings through an aqueous washing solution in which remaining aminoxide is washed out from the mouldings; and
- (e) removing at least some of the aqueous solutions from stage (c) and (d) for measuring a nonoptical property and for regulating the composition of the measured aqueous solutions according to the deviation of the measured value of at least one non-optical property from a given reference value determined from a standard for a reference aqueous composition wherein the measured nonoptical property of the aqueous solution is selected from the group consisting of: dielectricity constant, inductive conductivity, microwave absorption, density, water content and ultrasonic speed.



REMARKS

Allowable Subject Matter

In the May 13, 2005 Office Action claims 6-7 and 11-14 were found allowable.

Rejection of Claims and Traversal Thereof

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In the May 13, 2005 Office Action:

claims 1-5, 8-10 and 15-16 were rejected under 35 U.S.C. §112, second paragraph.

These rejections are traversed and reconsideration of the patentability of the pending claims is therefore requested in light of the following remarks.

Rejection under 35 U.S.C. §112, second paragraph

Claims 1-5, 8-10 and 15-16 were rejected under 35 U.S.C. §112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

According to the Office:

"Claims 1 and 16 are vague and indefinite because the limitation "according to the deviation of the measured value of at least one non-optical property from a given reference value for a reference-composition " is unclear. . . . The reference-composition must be a known or identifiable reference-composition in order for the process to be practiced."

Initially it should be noted that in rejecting a claim under the second paragraph, of 35 U.S.C. §112, it is incumbent on the Office to establish that one of ordinary skill in the pertinent art, when reading the claims in light of the support specification, would not have been able to ascertain with a reasonable degree of precision and particularity the particular area set out and circumscribed by the claims. In re Wu, 10 USPQ2d 2031 (BPAI 1989).

The object of the present invention is based on monitoring spinning solutions so that concentration of the components in the spinning solution can be quickly adjusted according to an optimal concentration of each component. For example, at page 7, in the last paragraph, there is a



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discussion regarding taking a measurement of a non optical property in a working solution and then the measuring device sends the measured value to a microprocessor wherein the measured value is compared to a value determined from a reference standard solution to determine the difference from the measured value of the working solution and that of the standard solution. This measurement and comparison step is further discussed on page 8, wherein the concentration of the evaporated solution is measured and then this measurement is compared with a reference value from a known and optimal concentration.

Clearly, this application was originally written in German and then subsequently translated into English. In the states, we usually use the term "standard value or solution" but clearly, the German equivalent is the term "reference."

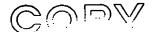
Notably, the numerical value of the non-optical property is a function of the concentration. Thus, one skilled in the art could easily prepare a standard curve that includes values for different standardized concentration, both above and below the optimal concentration. The optimal value of the aminoxide aqueous solution is thus known ahead of time and with the standardized curve, it can easily be determined how the measured working aminoxide solution needs to be adjusted by comparing the determined value from the working solution against the values in the standardized curve.

Applicants submit that the definiteness of the language employed must be analyzed - not in a vacuum, but in light of the teaching of the prior art and of the disclosure as it would be interpreted by one possessing the ordinary level of skill in the art. Applicants further submit that the quantitative analysis described in the present invention is known and understandable to most undergraduate chemistry student and thus meets all requirements of definiteness.

Accordingly, applicants request the withdrawal of this rejection under 35 U.S.C. §112, second paragraph in light of the amendment to the claims herein.

Conclusion

Applicant has satisfied the requirements for patentability. All pending claims are free of the art and fully comply with the requirements of 35 U.S.C. §112. It therefore is requested that Examiner Del Sole reconsider the patentability of all pending claims in light of the distinguishing remarks herein and withdraw all rejections, thereby placing the application in condition for allowance. Notice of the same is



earnestly solicited. In the event that any issues remain, it is requested that the undersigned attorney be contacted at (919) 419-9350 to resolve same.

Respectfully submitted,

Marianne Fuierer Reg. No. 39,983 Attorney for Applicant

INTELLECTUAL PROPERTY/ TECHNOLOGY LAW P.O. Box 14329 Research Triangle Park, NC 27709 Phone: (919) 419-9350 Fax: (919) 419-9354 Attorney File: 4197-116